

In re application of: Eric Walker  
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Examiner: David Faber  
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Commissioner for Patents  
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### **APPEAL BRIEF**

This Appeal Brief is provided in support of the Notice of Appeal and Pre-Brief Conference Request filed May 17, 2007 following the Notice of Panel Decision mailed July 30, 2007.

## **I. Real Party in Interest**

The real party in interest is VistaPrint Technologies Limited, a wholly owned subsidiary of VistaPrint Limited.

## **II. Related Appeals and Interferences**

There are no related appeals or interferences.

### **III. Status of Claims**

Pending claims 1-10, 12 and 16-21 have been twice rejected and are the subject of this appeal. No other claims are pending.

#### **IV. Status of Amendment**

No amendments have been filed subsequent to the final rejection.

## **V. Summary of the Claimed Subject Matter**

The pending claims relate to systems and methods for automatically preparing and presenting a second customized product to a user while the user is in the process of ordering a first product.

### Independent Claim 1

Claim 1 recites a computer-implemented method for generating a color image (300 in Figs. 5 and 6), the method comprising associating at least one color with a markup language element (302 in Figs. 5 and 6) capable of accepting image content, applying a grayscale image as content of the element ([0034], [0035]), and applying the at least one color associated with the element as at least one component color of the content image ([0034], [0035]).

### Dependent Claim 2

Claim 2 recites displaying at least the content image to a user (302 in Fig. 5), providing a plurality of color groups (500 in Fig. 5, [0037]), allowing the user to select a group from the plurality of groups ([0038]), after the selection of a group by the user, modifying the content image by replacing at least one of the color components of the content image with at least one of the colors in the selected group ([0038]), and displaying at least the modified content image to the user ([0038]).

### Dependent Claim 3

Claim 3 recites displaying at least the content image to a user (302 in Fig. 6, [0039]), providing a color palette containing a plurality of individually selectable colors (600 in Fig. 6, [0040]), allowing the user to select a color from the palette ([0040]), after the selection of a color by the user, modifying the content image by replacing one of the color components of the content image with the selected color ([0041]), and displaying at least the modified content image to the user ([0041]).

Dependent Claim 4

Claim 4 recites the element is a shape and the grayscale image is applied as pattern fill content of the shape ([0037] and [0040]).

Dependent Claim 5

Claim 5 recites incorporating the content image into an electronic product design (300 in Figs. 4 and 5, [0038], [0041]), and displaying the electronic product design to a user ([0038], [0041]).

Independent Claim 6

Claim 6 recites a color image system comprising at least one server (110 in Fig. 1), a color image software system encoded on one or more computer readable media (106 in Fig. 1), the system having one or more markup language elements (302) having at least one associated color attribute and having grayscale content image ([0034], [0035]), computer code (106 in Fig. 1) for applying the at least one color attribute of the element as at least one color component of the content image ([0034], [0035]) and computer code (106 in Fig. 1) for supplying at least the element to a user computer for displaying to a user.

Dependent Claim 8

Claim 8 recites the element is a markup language shape and the grayscale image is applied as a pattern fill of the shape ([0037] and [0040]).

Independent Claim 10

Claim 10 recites a color image generation program (106 in Fig. 1) encoded on one or more computer readable media and adapted to execute in a browser program (105 in Fig. 1) running on a user computer (100 in Fig. 1), the program comprising computer code (106 in Fig. 1) adapted to display a markup language element at the user computer, the element having a grayscale image applied as content and having at least one associated color attribute used as at least one color

component of the grayscale image ([0034], [0035]), computer code (106 in Fig. 1) adapted to display at least one color selection tool to the user of the user computer ([0034], [0035]), and computer code (106 in Fig. 1), responsive to the selection of one or more colors by the user, adapted to modify the content image by applying the one or more selected colors as one or more color attributes of the element ([0034], [0035]).

#### Independent Claim 16

Claim 16 recites a computer-implemented method of displaying an electronic product design (300 in Figs. 5 and 6) at a computer (100 in Fig. 1) executing a browser program (105 in Fig. 1), the method comprising receiving electronic product design information, the information including at least one markup language element (302 in Figs. 5 and 6) having at least one associated color attribute and having grayscale image content ([0034], [0035]), and identifiers of a plurality of colors (326 in Fig. 5 and 600 in Fig. 6), and processing the received information in the browser program to display an electronic product design to a user, the electronic design including at least the at least one element, the image content of the at least one element being generated by applying at least one color from the plurality of colors as at least one color attribute of the at least one element and using the at least one color attribute of the at least one element as at least one component color of the grayscale image content of the element ([0034], [0035]).

#### Dependent Claim 19

Claim 19 recites allowing the user to place an order for the production of one or more products from the electronic product design (310 in Fig. 3, [0042]).

#### Dependent Claim 21

Claim 21 recites allowing the user to place an order for the production of one or more products from the electronic product design (310 in Fig. 3, [0042]).



## **VI. Grounds of Rejection to be Reviewed on Appeal**

A. Whether Claims 1, 3-4, 6-8, 10, 16-18, and 20-21 are unpatentable under 35 U.S.C. §102(b) as being anticipated by Coloring.com (Coloring.com, “Coloring.com – free online interactive coloring pages and coloring books”, paragraph 1-27, 28-31).

B. Whether Claims 2, 5, 9, 12, 15, and 19 are unpatentable under 35 U.S.C. 103(a) over Coloring.com in view of Sams Publishing (Sams Publishing, “Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes”, published 5/6/1999, printed pages 1-11, 12-16).

## VII. Argument

**A. Claims 1, 3-4, 6-8, 10, 16-18, and 20-21 are NOT unpatentable under 35 U.S.C. §102(b) as being anticipated by Coloring.com (Coloring.com, “Coloring.com – free online interactive coloring pages and coloring books”, paragraph 1-27, 28-31).**

In the pending application, uses and benefits of the claimed invention are illustrated in the context of a flexible electronic product customization system that allows a template provider to give users the ability to exercise extensive control over the colors used in the product being designed. As discussed at [0027] through [0029], to assist customers in preparing useful and attractive products, the site provides a variety of pre-designed product templates having various combinations of images, colors, graphic elements and other design features (e.g., post card template 220 in Fig. 2). As described at [0030], images, which may include a wide variety of content, such as photograph, graphic, texture, pattern, word art, etc., are placed in areas called image containers (302 and 304 in Fig. 3). In the illustrative embodiment shown in Figs. 3-6, a product template 300 includes a background image area (304 in Fig. 3) and a smaller image area (302 in Fig. 3) that appears over the background image area (304 in Fig. 3). The image containers are defined as vector markup language (VML) shapes ([0021]). To create a grayscale image, the VML shape is further defined to be filled with a pattern (which can be any pattern, photograph, texture, graphic, or other image). Patterns in VML are rendered based on the combination of two VML specified colors ([0021]).

To allow the user to customize the product design, the user is provided with template editing tools, which include three different color control tools (314, 316, 318 in Fig. 3; [0031], [0032]). The first tool is a “Change Overall Color Scheme” button (314 in Fig. 3; [0033]) that allows the user to select one of a number of pre-

designed alternate product color schemes which, when selected by the user, is applied to the entire product being designed. The second tool is a “Change Color Scheme of Selected Image” button (316 in Fig. 3; [0034]) that allows the user to select one of a number of pre-designed color *pairs* which, when selected by the user, replaces the *pair* of colors currently applied to an appropriately selected image area (302 in Fig. 3) containing *grayscale* image content in the template (300 in Fig. 3). The third tool is a “Create Custom Color Scheme for Selected Image” tool comprising two individual buttons (320, 322 in Fig. 3; [0035]) that allows the user to choose a first component color and a second component color of an appropriately selected image area (302 in Fig. 3) containing *grayscale* image content in the template (300 in Fig. 3) such that the grayscale image content is rendered in multiple color tones based on the combination of the first component color and the second component color ([0035], [0041]).

The claimed systems and methods are directed at computerized methods and systems for generating a grayscale image by associating at least one color with a markup language element having grayscale image content, and applying the at least one color associated with the element as at least one component color of the grayscale content image.

#### Claims 1-5 and 18-19

Independent **Claim 1** is directed to a “computer-implemented method for generating a color image, the method comprising associating at least one color with a markup language element capable of accepting image content, applying a grayscale image as content of the element, and applying the at least one color associated with the element as at least one component color of the content image.”

Turning to the *Coloring.com* reference, Coloring.com discloses an online coloring book application wherein a user may select a black-and-white template from among a number of pre-designed black-and-white templates. Upon selection of a particular template, the user may then select either a color or an image from among

a number of pre-determined colors and images displayed on a color palette toolbar. Upon selection of a color or image from the color/image palette, the user may then click within an area of the template to select an area from among a number of pre-designed areas in the template, and the system will automatically fill the selected area with the selected color/image and display it to the user. As of the date of this Appeal Brief, the online coloring book application cited in Coloring.com is still operating at the website [www.coloring.com](http://www.coloring.com) in this same manner, and the reviewers of this Appeal are encouraged to quickly try the above process.

Applicant's Claim 1 recites "applying a *grayscale* image as content of the element" and Applicant's Claim 6 recites "one or more markup language elements having at least one associated color attribute and having *grayscale* content image".

Importantly, Coloring.com does not teach or suggest an image container having *grayscale* image content. In Coloring.com, each pre-designed area in a selected template is filled with either no color, a single solid color, or one of a number of pre-determined images (such as grass, crinkle, thatch, space, granite). None of the fill options are grayscale image content. As explicitly defined in the Applicant's Specification at [0023], the term "grayscale" or "grayscale image" refers to "image content intended to be rendered in multiple color tones based on the combination of two component colors." This definition is reiterated throughout the Applicant's Specification at least at [0024] ("While grayscale images are generally thought of in terms of shades derived by varying the combination of black and white, any two colors could be used to print a grayscale-type image by assigning a first color to be used in place of "white" and a second color to be used in place of "black" with the intermediate "gray" shades being generated by appropriately controlling the proportions of the first and second colors.") and the Abstract ("When a grayscale image is applied as pattern fill, the original black and white color components of the grayscale image are replaced with the two colors specified by the pattern fill element and a color version of the image based on the two colors is displayed to the user as the content of the shape.").

Coloring.com does not teach or suggest any element having a “grayscale image” as its content. On page 4 of the Final Office Action, the Examiner cites Coloring.com as disclosing “grayscale images wherein only the two colors are shown, white and black; wherein black and white images are a form of grayscale images.” The Applicant respectfully disagrees. As defined in the Applicant’s Specification at [0023] and as described in detail above, a “grayscale” image is one that is “rendered in multiple color tones based on the *combination* of *two* component colors.” Black and white images are not “grayscale” images as defined in Applicant’s Specification.

First, the black outlines of the shape elements are not even part of the image content. The Coloring.com templates are originally rendered for display to the user using shape elements having black outlines and empty or white fill. No matter what fill the user chooses, the fill is only applied to the *content* (called “fill”) of the selected shape element. The outline remains black and is unchangeable. If the Examiner and reviewers of this Appeal visit the [www.coloring.com](http://www.coloring.com) website and change the colors or images in a selected area of any of the templates, the reviewers will notice that the selected shape element is filled with the selected color/image but the outline of the shape element always remains black. The reason for this is that the outline of a shape element is defined in the markup language source code as a separate property of the shape element which is separate and apart from the fill property (i.e., the content or “fill pattern”) of the shape element. Thus, the outline of the shape element cannot be considered part of the image *content* of the shape element, and therefore cannot even be considered a color component of the image content. Thus, when the selected fill color is empty or white (as originally presented to the user) or is filled with a color selected from the array of colors in the color palette tool on the left of the display, the image content includes only a *single* color component, which clearly does not meet the definition of a “grayscale” image in accordance with the Applicant’s Claims.

Even when one of the images (such as grass, crinkle, thatch, space, granite) is selected as the fill for a selected image shape, these images are also not even grayscale. They are merely *actual* images or graphics which are not defined in the markup language source code as a pattern specified with two associated component colors. In fact, the method by which coloring.com fills an element shape with an image is to set the “color” property of the element to an actual image instead of to an absolute color. Thus, the image fills (such as grass, crinkle, thatch, space, granite) are treated as colors themselves by the coloring.com system and not as a grayscale image to be “rendered in multiple color tones based on the *combination* of *two* component colors.”

In addition, even if the black outlines were considered as part of the image content of a shape element, Coloring.com does not show any shape element having any color tone that is a “*combination*” of black and white (or two other component colors). Thus, the black-and-white template image recited by the Examiner as being a form of grayscale image cannot be considered a “grayscale” image in accordance with Applicant’s recited Claims 1 and 6.

Coloring.com also does not teach or suggest “applying the at least one color associated with the element as at least one component color of the content image” of Applicant’s Claim 1. The recited “content image” is the grayscale image recited in the previously discussed limitation “applying a *grayscale* image as content of the element”. As previously explained, a grayscale image comprises multiple color tones based on the combination of *two component* colors. Coloring.com only allows a shape element to be filled with a single fill, which is either a solid color or an imported image. Coloring.com’s shape elements do not contain grayscale images, and therefore it is not possible in Coloring.com to apply a color associated with a shape element as a component color of the grayscale image. A selected color (or image) fills the entirety of a selected image container in the Coloring.com application, and there is neither a second color component used to render the fill nor any portion of the selected image container in which there is rendered multiple

color tones based on the combination of two component colors associated with a grayscale image. Thus, Coloring.com does not meet the limitation “applying the at least one color associated with the element as at least one component color of the content image” as required by Applicant’s Claim 1.

In summary, the recited claims are directed at allowing a user to select at least one component color of a pair of grayscale component colors and apply it to the grayscale image such that the grayscale image will be rendered in multiple color tones based on the combination of the selected component color and one other color. Coloring.com does not teach this.

A prima facie case for anticipation under 35 U.S.C. §102 requires that a reference teach each and every element of the claim. As described in detail above, Coloring.com clearly does not teach all of the limitations of Applicant’s independent Claim 1. In particular, Coloring.com does not teach or suggest “applying a *grayscale* image as content of the element, and applying the at least one color associated with the element as at least one *component* color of the content image.” Accordingly, the Applicant respectfully contends that the Examiner has not built a prima facie case for obviousness under 35 U.S.C. §102, and that the rejection of Claim 1 under 35 U.S.C. §102(b) should therefore be withdrawn.

In addition, Coloring.com cannot even be combined with the other prior art of record, namely Sams Publishing, to build a rejection of Claim 1 obvious over the cited art under 35 U.S.C. §103.

Each of Claims 1-5 and 18-19 depends from independent base Claim 1 and adds further limitations. Claims 1-5 and 18-19 are believed allowable for at least the same reasons that independent Claim 1 is believed allowable over the cited references.

Claim 3

Claim 3 is believed allowable on independent grounds because Coloring.com does not teach or suggest the limitations recited in Claim 3, including “displaying at least the content image to a user, providing a color palette containing a plurality of individually selectable colors, allowing the user to select a color from the palette, after the selection of a color by the user, modifying the content image by replacing one of the color components of the (grayscale) content image with the selected color.” Coloring.com provides the user with a color palette which includes a number of different individual colors. However only one color can be selected at any given time, and the selected color is used to fill the entire image container and not used as one of two color components for a grayscale image. Accordingly, the Applicant respectfully contends that the rejection of Claim 3 under 35 U.S.C. §102(b) should be withdrawn.

Claim 4

Claim 4 is believed allowable on independent grounds because Coloring.com does not teach or suggest the limitations recited in Claim 4, including “the grayscale image is applied as pattern fill content of the shape.” Coloring.com fills its shapes as solid colors or as image imports, and not as a pattern fill. Accordingly, the Applicant respectfully contends that the rejection of Claim 4 under 35 U.S.C. §102(b) should be withdrawn.

Claims 6-9

Claim 6 recites similar limitations to Claim 1 and is believed allowable over Coloring.com and Sams Publishing for at least the same reasons as Claim 1 is allowable thereover. In addition, Claim 6 recites “one or more markup language elements having ... grayscale content image”. As described in detail above, neither Coloring.com nor Sams Publishing teach or suggest a shape element defined in markup language which has grayscale content image. Thus, neither Coloring.com nor Sams Publishing, taken alone or in combination, teaches or suggests all of the limitations of Applicant’s Claim 6. Accordingly, the Applicant



respectfully contends that the rejection of Claim 6 under 35 U.S.C. §102(b) should be withdrawn.

Each of Claims 7-9 depends from independent base Claim 6 and adds further limitations. Claims 7-9 are believed allowable for at least the same reasons that independent Claim 6 is believed allowable over the cited references.

#### Claim 8

Claim 8 is believed allowable on independent grounds because Coloring.com does not teach or suggest the limitations recited in Claim 8, including “the grayscale image is applied as a pattern fill of the shape.” Coloring.com fills its shapes as solid colors or as image imports, and not as a pattern fill. Sams Publishing is silent on filling image elements. Accordingly, the Applicant respectfully contends that the rejection of Claim 8 under 35 U.S.C. §102(b) should be withdrawn.

#### Claims 10, 12

Claim 10 recites similar limitations to Claim 1 and is believed allowable over Coloring.com and Sams Publishing for at least the same reasons as Claim 1 is allowable thereover. In addition, Claim 10 recites “a markup language element at the user computer, the element having a grayscale image applied as content and having at least one associated color attribute used as *at least one color component of the grayscale image*”. As described in detail above, neither Coloring.com nor Sams Publishing teach or suggest a shape element defined in markup language which has grayscale content image. Thus, neither Coloring.com nor Sams Publishing, taken alone or in combination, teaches or suggests all of the limitations of Applicant’s Claim 10. Accordingly, the Applicant respectfully contends that the rejection of Claim 10 under 35 U.S.C. §102(b) should be withdrawn.

Claim 12 depends from independent base Claim 10 and adds further limitations. Claim 12 is believed allowable for at least the same reasons that independent Claim 10 is believed allowable over the cited references.

Claims 16-17 and 20-21

Claim 16 recites similar limitations to Claim 10 and is believed allowable over Coloring.com and Sams Publishing for at least the same reasons as Claim 10 is allowable thereover. Accordingly, the Applicant respectfully contends that the rejection of Claim 16 under 35 U.S.C. §102(b) should be withdrawn.

Each of Claims 16-17 and 20-21 depend from independent base Claim 16 and add further limitations. Claims 16-17 and 20-21 are believed allowable for at least the same reasons that independent Claim 16 is believed allowable over the cited references.

Claim 21

Claim 21 is believed allowable on independent grounds because Coloring.com does not teach or suggest the limitations recited in Claim 21, including “allowing the user to place an order for the production of one or more products from the electronic product design.” Coloring.com is silent on this feature. Accordingly, the Applicant respectfully contends that the rejection of Claim 21 under 35 U.S.C. §102(b) should be withdrawn.

**B. Claims 2, 5, 9, 12, 15, and 19 are NOT unpatentable under 35 U.S.C. 103(a) over Coloring.com in view of Sams Publishing (Sams Publishing, “Sams Teach Yourself Microsoft Publisher 2000 in 10 Minutes”, published 5/6/1999, printed pages 1-11, 12-16).**

*Sams Publishing* does not make up for the deficiencies of Coloring.com in meeting Applicant’s recited independent Claims 1, 6, 10, and 16. Sams Publishing is a quick start user manual for teaching readers to utilize Microsoft® Publisher 2000, a computerized publication application. Sams Publishing shows screen shots of Microsoft® Publisher wherein a user can preview a number of publication categories (Sams Publishing, page 2), select a category and then preview a number

of publications based on the selected category (Sams Publishing, page 3, wherein a number of business cards are displayed in response to a user selection of the business card category), select a particular publication and preview the selected publication (Sams Publishing, Fig. 3.3, page 4), select a color scheme, and view the selected publication rendered with the selected color scheme. Sams Publishing does not teach or suggest any feature or technique for allowing a user to select and apply a color component to a grayscale image.

Sams Publishing does not teach or suggest the limitation of Applicant's Claims 1, 6, 10, and 16 including "applying a *grayscale* image as content of the element" (or similar recitation), which is missing from Coloring.com. The publication images are color images rendered according to a selected color scheme. There is simply no teaching or suggestion that any of the publications contain image containers that hold grayscale image content to be rendered in multiple color tones based on the combination of two component colors.

Sams Publishing also does not teach or suggest the limitation of Applicant's Claim 1 including "applying the at least one color associated with the element as at least one component color of the (grayscale) content image" (or similar recitation), which is missing from Coloring.com. Sams Publishing teaches nothing about component colors associated with grayscale images, and therefore does not teach or suggest any mechanism for selecting and applying a component color of a grayscale image.

A prima facie case for obviousness under 35 U.S.C. §103 requires that the references, taken in combination, teach all of the elements of the claim. As described in detail above, neither Coloring.com nor Sams Publishing, taken either alone or in combination, teach all of the limitations of Applicant's independent Claim 1. Accordingly, the Applicant respectfully contends that the Examiner cannot even build a prima facie case rejecting Claim 1 for obviousness under 35 U.S.C. §103.

### Claim 2

Claim 2 depends from independent base Claim 1 and adds further limitations and is thus believed allowable for at least the same reasons that independent Claim 1 is believed allowable over the cited references.

Claim 2 is believed allowable on independent grounds because neither Coloring.com nor Sams Publishing teach or suggest the limitations recited in Claim 2, including “providing a plurality of color groups, allowing the user to select a group from the plurality of groups, after the selection of a group by the user, modifying the content image by replacing at least one of the color components of the content image with at least one of the colors in the selected group.” Coloring.com provides the user with a color palette which includes a number of different individual colors. However only one color can be selected at any given time, and none of the colors are associated with any other of the colors in groups. The color schemes of Sams Publishing may be considered as color groups, but the color schemes are applied only to the entire selected publication and not to any grayscale image content. Thus, neither Coloring.com nor Sams Publishing, taken alone or in combination, teaches or suggests all of the limitations of Applicant’s Claim 2. Accordingly, the Applicant respectfully contends that the rejection of Claim 2 under 35 U.S.C. §103(a) should be withdrawn.

### Claim 5

Claim 5 depends from independent base Claim 1 and adds further limitations. The same reasons discussed above with respect to Claim 1 regarding the impropriety of an obviousness-type rejection of under 35 U.S.C. §103(a) apply to the impropriety of an obviousness-type rejection of Claim 5. Claim 5 is thus also believed allowable over the cited references.

### Claim 19

Claim 19 depends from independent base Claim 1 and adds further limitations. The same reasons discussed above with respect to the impropriety of applying an obviousness-type rejection of under 35 U.S.C. §103(a) to independent Claims 1, 6, 10 and 16 apply to the impropriety of an obviousness-type rejection of Claim 19. Claim 19 is thus also believed allowable over the cited references.

#### Claim 9

Claim 9 depends from independent base Claim 6 and adds further limitations. The same reasons discussed above with respect to the impropriety of applying an obviousness-type rejection of under 35 U.S.C. §103(a) to independent Claims 1, 6, 10 and 16 apply to the impropriety of an obviousness-type rejection of Claim 9. Claim 9 is thus also believed allowable over the cited references.

#### Claims 12-15


Claims 12-15 each depend from independent base Claim 10 and add further limitations. The same reasons discussed above with respect to the impropriety of applying an obviousness-type rejection of under 35 U.S.C. §103(a) to independent Claims 1, 6, 10 and 16 apply to the impropriety of an obviousness-type rejection of Claims 12-15. Claims 12-15 are thus also believed allowable over the cited references.

**Conclusion**

For the reasons set forth above, Applicant respectfully submits that each claim is patentable and reversal of all rejections is respectfully requested.

Respectfully submitted,

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### **VIII. Claims Appendix**

1. A computer-implemented method for generating a color image, the method comprising
  - associating at least one color with a markup language element capable of accepting image content,
  - applying a grayscale image as content of the element, and
  - applying the at least one color associated with the element as at least one component color of the content image.
2. The method of claim 1 further comprising
  - displaying at least the content image to a user,
  - providing a plurality of color groups,
  - allowing the user to select a group from the plurality of groups,
  - after the selection of a group by the user, modifying the content image by replacing at least one of the color components of the content image with at least one of the colors in the selected group, and
  - displaying at least the modified content image to the user.
3. The method of claim 1 further comprising
  - displaying at least the content image to a user,
  - providing a color palette containing a plurality of individually selectable colors,
  - allowing the user to select a color from the palette,

after the selection of a color by the user, modifying the content image by replacing one of the color components of the content image with the selected color, and

displaying at least the modified content image to the user.

4. The method of claim 1 wherein the element is a shape and the grayscale image is applied as pattern fill content of the shape.

5. The method of claim 1 further comprising

incorporating the content image into an electronic product design, and displaying the electronic product design to a user.

6. A color image system comprising

at least one server,

a color image software system encoded on one or more computer readable media, the system having

one or more markup language elements having at least one associated color attribute and having grayscale content image,

computer code for applying the at least one color attribute of the element as at least one color component of the content image and

computer code for supplying at least the element to a user computer for displaying to a user.



7. The system of claim 6 further comprising

at least one color selection tool,

computer code for allowing a user to select at least one color with the color selection tool, and

computer code for applying the at least one selected color as at least one color component of the content image.

8. The system of claim 6 wherein the element is a markup language shape and the grayscale image is applied as a pattern fill of the shape.

9. The system of claim 7 further comprising

computer code for incorporating the content image into an electronic product design, and

computer code for displaying the electronic product design to a user.

10. A color image generation program encoded on one or more computer readable media and adapted to execute in a browser program running on a user computer, the program comprising

computer code adapted to display a markup language element at the user computer, the element having a grayscale image applied as content and having at least one associated color attribute used as at least one color component of the grayscale image,

computer code adapted to display at least one color selection tool to the user of the user computer, and

computer code, responsive to the selection of one or more colors by the user, adapted to modify the content image by applying the one or more selected colors as one or more color attributes of the element.

12. The program of claim 10 further comprising

computer code adapted to incorporate the element into an electronic product design, and

computer code adapted to display the electronic product design to the user.

16. A computer-implemented method of displaying an electronic product design at a computer executing a browser program, the method comprising

receiving electronic product design information, the information including at least one markup language element having at least one associated color attribute and having grayscale image content, and identifiers of a plurality of colors, and

processing the received information in the browser program to display an electronic product design to a user, the electronic design including at least the at least one element, the image content of the at least one element being generated by applying at least one color from the plurality of colors as at least one color attribute of the at least one element and using the at least one color attribute of the at least one element as at least one component color of the grayscale image content of the element.

17. The method of claim 16 further comprising

allowing the user of the computer to select one or more colors from the plurality of colors,

after selection of the one or more colors, modifying the product design by applying the one or more user-selected colors as one or more color components of at least the grayscale image, and

displaying the modified displayed electronic design to the user.

18. One or more computer readable media encoded with computer executable instructions for performing the method of claim 1.

19. The method of claim 5 further comprising allowing the user to place an order for the production of one or more products from the electronic product design.

20. One or more computer readable media encoded with computer executable instructions for performing the method of claim 16.

21. The method of claim 17 further comprising allowing the user to place an order for the production of one or more products from the electronic product design.

## **IX. Evidence Appendix**

None

**X. Related Proceedings Appendix**

None